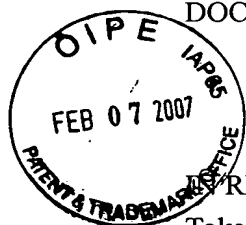


IFW



DOCKET NO.: 277944US28X PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RE APPLICATION OF:

Takashi KIKUKAWA, et al.

SERIAL NO: 10/519,169

GROUP: 2626

FILED: September 16, 2005

EXAMINER:

FOR: OPTICAL RECORDING/REPRODUCING METHOD AND OPTICAL
RECORDING MEDIUM

LETTER

Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a Chinese Office Action with English Translation for the
Examiner's consideration. The reference cited therein has been previously filed on November 16,
2005.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



James J. Kulbaski

Registration No. 34,648

Fred L. Braun

Registration No. 56,123

Customer Number

22850

Tel. (703) 413-3000
Fax. (703) 413-2220
(OSMMN 03/06)

THE PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Address: 6 Xijie Lu, Haidian, Beijing

Post Code: 100088

Applicant:	TDK CORPORATION; NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY; PIONEER CORPORATION (パイオニア株式会社); SHARP KABUSHIKI KAISHA (SHARP CORPORATION) シャープ株式会社; SAMSUNG JAPAN CORPORATION	Date of Notification: Date: <u>10</u> Month: <u>11</u> Year: <u>2006</u>
Attorney:	FU JIANJUN	
Application No.:	03817344.1	
Title of the Invention:	METHOD FOR OPTICALLY RECORDING AND REPRODUCING DATA AND OPTICAL RECORDING MEDIUM	

Notification of the First Office Action (PCT Application in the National Phase)

1. ☒ The applicant requested examination as to substance and examination has been carried out on the above-identified patent application for invention under Article 35(1) of the Patent Law of the People's Republic of China (hereinafter referred to as "the Patent Law").
☐ The Chinese Patent Office has decided to examine the application on its own initiative under Article 35(2) of the Patent Law.

2. ☒ The applicant claimed priority/priorities based on the application(s):
 filed in JP on June 24, 2002, filed in JP on Feb. 19, 2003,
 filed in _____ on _____, filed in _____ on _____.

3. ☐ The following amendments submitted by the applicant are not acceptable under Art. 33 of the Patent Law:

- ☐ The Chinese translation of the amendments annexed to the IPEA Report.
- ☐ The Chinese translation of the amendments made under Art. 19 of PCT.
- ☐ The amendments made under Art. 28 or Art. 41 of PCT.
- ☐ The amendments made under Rule 51 of the Implementing Regulations of the Patent Law.

Specific reasons why the amendments are not acceptable are set forth in the text portion of this Notification.

4. ☐ Examination was directed to the Chinese translation of the International Application as originally filed.
☒ Examination was directed to the application documents as specified below:
☒ Description ☒ Pages 1-30 of the Chinese translation of the International Application as originally filed.
☐ Pages _____ of the Chinese translation of the amendments annexed to the IPEA Report.
☐ Pages _____ of the amendments made under Art. 28 or Art. 41 of PCT.
☐ Pages _____ of the amendments made under Rule 51 of the Implementing Regulations of the Patent Law.
☒ Claims ☒ The Chinese translation of claims 1-8 of the International Application as originally filed.
☐ The Chinese translation of claims _____ of the amendments made under Art. 19 of PCT.
☐ The Chinese translation of claims _____ of the amendments annexed to the IPEA Report.
☐ The Chinese translation of claims _____ of the amendments made under Art. 28 or Art. 41 of PCT.
☐ The amendments of the claims _____ made under Rule 51 of the Implementing Regulations of the Patent Law.
☒ Drawings ☒ Pages 1-11, 13 of the Chinese translation of the International Application as originally filed.
☐ Pages _____ of the Chinese translation of the amendments annexed to the IPEA Report.
☐ Pages _____ of the amendments made under Art. 28 or Art. 41 of PCT.
☒ Pages 12 submitted on March 14, 2005..

5. ☒ Below is/are the reference(s) cited in this Office Action (the reference number(s) will be used throughout the examination procedure):

No.	Number(s) or Title(s) of Reference(s)	Date of Publication (or the filing date of conflicting application)
1	JP6-262854A	Date: <u>20</u> Month: <u>09</u> Year: <u>1994</u>

6. Conclusions of the Action:

Filed Nov 16, 2005

- ☒ On the Specification:
- ☐ The subject matter contained in the application is not patentable under Article 5 of the Patent Law.
 - ☐ The description does not comply with Article 26 paragraph 3 of the Patent Law.
 - ☒ Fig. 1 does not comply with Rule 19 of the Implementing Regulations.
- ☒ On the Claims:
- ☐ Claim(s) _____ is/are not patentable under Article 25 of the Patent Law.
 - ☐ Claim(s) _____ does/do not comply with the definition of inventions prescribed by Rule 2 paragraph 1 of the Implementing Regulations.
 - ☒ Claim(s) 8 does/do not possess the novelty as required by Article 22 paragraph 2 of the Patent Law.
 - ☐ Claim(s) _____ does/do not possess the inventiveness as required by Article 22 paragraph 3 of the Patent Law.
 - ☐ Claim(s) _____ does/do not possess the practical applicability as required by Article 22 paragraph 4 of the Patent Law.
 - ☐ Claim(s) _____ does/do not comply with Article 26 paragraph 4 of the Patent Law.
 - ☐ Claim(s) _____ does/do not comply with Article 31 paragraph 1 of the Patent Law.
 - ☒ Claim(s) 1 does/do not comply with the provisions of Rules 20-23 of the Implementing Regulations.
 - ☐ Claim(s) _____ does/do not comply with Article 9 of the Patent Law.
 - ☐ Claim(s) _____ does/do not comply with the provisions of Rule 12 paragraph 1 of the Implementing Regulations.

The explanations to the above conclusions are set forth in the text portion of this Notification.

7. In view of the conclusions set forth above, the Examiner is of the opinion that:

- ☐ The applicant should make amendments as directed in the text portion of the Notification.
- ☒ The applicant should expound in the response reasons why the application is patentable and make amendments to the application where there are deficiencies as pointed out in the text portion of the Notification, otherwise, the application will not be allowed.
- ☐ The application contains no allowable invention, and therefore, if the applicant fails to submit sufficient reasons to prove that the application does have merits, it will be rejected.
- ☐ _____

8. The followings should be taken into consideration by the applicant in making the response:

- (1) Under Article 37 of the Patent Law, the applicant should respond to the office action within 4 months counting from the date of receipt of the Notification. If, without any justified reason, the time limit is not met, the application shall be deemed to have been withdrawn.
- (2) Any amendments to the application should be in conformity with the provisions of Article 33 of the Patent Law. Substitution pages should be in duplicate and the format of the substitution should be in conformity with the relevant provision contained in "The Examination Guidelines".
- (3) The response to the Notification and/or revision of the application should be mailed to or handed over to the "Reception Division" of the Patent Office, and documents not mailed or handed over to the Reception Divisions have no legal effect.
- (4) Without an appointment, the applicant and/or his agent shall not interview with the Examiner in the Patent Office.

9. This Notification contains a text portion of 1 pages and the following attachments:

- ☒ 1 cited reference(s), totaling 5 pages. ☐ _____

Examination Dept. 3 Examiner: QIAO Dongfeng Seal of the Examination Department

Text of the Notification of the First Office Action

CN Application No. 03817344.1

The present application relates to an optical data recording method and medium. As described in the description, the technical problem to be solved by the present application is "to record and reproduce a recording mark train including a recording mark having a size nearly equal to the resolution limit determined by the diffraction of light or smaller than the resolution limit". After examination, the examiner presents the following comments:

1. Claim 1 lacks essential technical features necessary for achieving the object of the invention and thus does not comply with Rule 21.2 of the IRCPL. The technical problem to be solved by the invention is to record and reproduce the recording mark having a length shorter than $0.37\lambda/NA$ (as claimed in Claim 1). As described in the description (see from Page 11 Line 11 to Page 12 Line 11 of the description), in order to record and reproduce such a recording mark, "when data are to be recorded in the optical recording medium... AgO_x is decomposed into Ag and $x/2 \cdot O_2$ in the noble metal oxide layer 4 constituted by AgO_x , and the light absorption layer 5 is crystallized. The oxygen gas generated when data are to be recorded expands in the noble metal oxide layer 4, thereby deforming the noble metal oxide layer 4 and pushing the second dielectric layer 32 and the light absorption layer 5 up...". That is to say, in order to achieving recording, the existence of the second dielectric layer and the light absorption layer is necessary; otherwise, the readable recording mark having a length shorter than $0.37\lambda/NA$ cannot be obtained. The applicant shall recite in Claim 1 technical features relating to the second dielectric layer and light absorption layer and the recording processes and principles based on this structure (especially deformation of the second dielectric layer and the light absorption layer).

2. The technical solution of Claim 1 is unclearly defined and thus does not comply with Rule 20.1 of the IRCPL. The expression "irreversibly depositing noble metal particles in the noble metal oxide layer" in Claim 1 is unclear in terms of the

meaning, because the noble metal particles do not exist in the recording medium before recording and they are generated by decomposition of the metal oxide during recording, but the above expression seems to say that the metal particles are added from the outside. Therefore, the applicant shall re-draft this expression according to the disclosure contained in the description so as to clearly and correctly define the technical solution.

3. Claim 8 does not possess novelty as required by Article 22.2 of the CPL. Claim 8 claims an optical recording medium, while Reference 1 (JP6-262854A) has disclosed an optical recording medium and has specifically (see Paragraphs [0018], [0025] and [0026] of the description) revealed the following technical features: comprising a recording layer that is constituted as a platinum oxide and/or gold oxide (i.e. noble metal oxide). Therefore, Reference 1 has disclosed all the technical features of Claim 8. And both the technical solution disclosed by Reference 1 and the technical solution as claimed in Claim 8 pertain to the same technical field and can create the same technical effect. Therefore, the technical solution as claimed in Claim 8 does not possess novelty as required by Article 22.2 of the CPL.

4. Fig.1 of the present application is not clear enough to clearly discriminate details of the figure, which does not comply with the provision of Rule 19.2 of the IRCPL. The applicant shall re-submit a figure that satisfies the above provision.

Due to the reasons above, the present application cannot be patented based on the present application document. If the applicant amends the application document in accordance with the above comments and overcomes the existed defects, the application has a prospect to be granted a patent right. The amendment to the application document shall be in line with Article 33 of the CPL, not going beyond the scope of the disclosure contained in the initial description and claims.

Examiner: QIAO Dongfeng

Code: 3611

中华人民共和国国家知识产权局

邮政编码: 100037

北京市阜成门外大街2号万通新世界广场8层

中国国际贸易促进委员会专利商标事务所

付建军

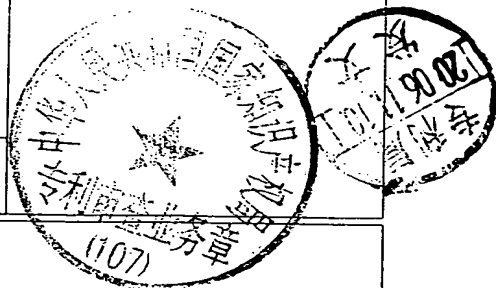
发文日期

申请号: 038173441



申请人: TDK 株式会社, 独立行政法人产业技术综合研究所, 日本先锋公司,

发明创造名称: 光学地记录和再现数据的方法和光学记录媒体



第一次审查意见通知书

(进入国家阶段的 PCT 申请)

1. ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。
☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局专利局决定自行对上述发明专利申请进行审查。
2. ☒ 申请人要求以在:
 - JP 专利局的申请日 2002 年 06 月 24 日为优先权日,
 - JP 专利局的申请日 2003 年 02 月 19 日为优先权日,
 - 专利局的申请日 年 月 日为优先权日。
3. ☐ 申请人于 年 月 日提交的修改文件, 不符合专利法实施细则第 51 条的规定。
☐ 申请人提交的下列修改文件不符合专利法第 33 条的规定。
 - ☐ 国际初步审查报告附件的中文译文。
 - ☐ 依据专利合作条约第 19 条规定所提交的修改文件的中文译文。
 - ☐ 依据专利合作条约第 28 条或 41 条规定所提交的修改文件。
 - ☐
4. ☐ 审查是针对原始提交的国际申请的中文译文进行的。
☒ 审查是针对下述申请文件进行的:
 - ☒ 说明书 第 1-30 页, 按照原始提交的国际申请文件的中文译文;
 - 第 页, 按照国际初步审查报告附件的中文译文;
 - 第 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;
 - 第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。
 - ☐
 - ☒ 权利要求 第 1-8 项, 按照原始提交的国际申请文件的中文译文;
 - 第 项, 按照依据专利合作条约第 19 条规定所提交的修改文件的中文译文。
 - 第 项, 按照国际初步审查报告附件的中文译文;
 - 第 项, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;
 - 第 项, 按照依据专利法实施细则第 51 条规定所提交的修改文件。
 - ☐
 - ☒ 附图 第 1-11, 13, 14 页, 按照原始提交的国际申请文件的中文译文;
 - 第 页, 按照国际初步审查报告附件的中文译文;
 - 第 页, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;
 - 第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。



申请号 038173441

☒附图第 12 页,按 2005 年 3 月 14 日提交的修改文件。

☒本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

编号	文件号或名称	公开日期(或抵触申请的申请日)
1	J1'6-262854A	1994-9-20

5. 审查的结论性意见:

☒关于说明书:

☐申请的内容属于专利法第 5 条规定的不授予专利权的范围。

☐说明书不符合专利法第 26 条第 3 款的规定。

☐说明书不符合专利法第 33 条的规定。

☐说明书的撰写不符合专利法实施细则第 18 条的规定。

☒说明书附图 1 不符合专利法实施细则第 19 条的规定。

☒关于权利要求书:

☒权利要求 8 不具备专利法第 22 条第 2 款规定的新颖性。

☐权利要求 不具备专利法第 22 条第 3 款规定的创造性。

☐权利要求 不具备专利法第 22 条第 4 款规定的实用性。

☐权利要求 属于专利法第 25 条规定的不授予专利权的范围。

☐权利要求 不符合专利法第 26 条第 4 款的规定。

☐权利要求 不符合专利法第 31 条第 1 款的规定。

☐权利要求 不符合专利法第 33 条的规定。

☐权利要求 不符合专利法实施细则第 13 条第 1 款的规定。

☐权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。

☒权利要求 1 不符合专利法实施细则第 20 条的规定。

☒权利要求 1 不符合专利法实施细则第 21 条的规定。

☐权利要求 不符合专利法实施细则第 22 条的规定。

☐权利要求 不符合专利法实施细则第 23 条的规定。

☐

上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见,审查员认为:

☐申请人应按照通知书正文部分提出的要求,对申请文件进行修改。

☒申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由,并对通知书正文部分中指出的不符合规定之处进行修改,否则将不能授予专利权。

☐专利申请中没有可以被授予专利权的实质性内容,如果申请人没有陈述理由或者陈述理由不充分,其申请将被驳回。

☐

7. 申请人应注意下述事项:

(1)根据专利法第 37 条的规定,申请人应在收到本通知书之日起的肆个月内陈述意见,如果申请人无正当理由逾期不答复,其申请将被视为撤回。

(2)申请人对其申请的修改应符合专利法第 33 条的规定,修改文本应一式两份,其格式应符合审查指南的有关规定。

(3)申请人的意见陈述书和 / 或修改文本应邮寄或递交国家知识产权局专利局受理处,凡未邮寄或递交给受理处的文件不具备法律效力。

(4)未经预约,申请人和 / 或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 1 页,并附有下列附件:

☒引用的对比文件的复印件共 1 份 5 页。

☐

审查员: 乔东峰(3611)

2006 年 10 月 22 日

审查部门

通信审查部

21302

2002. 8



回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收
(注: 凡寄给审查员个人的信函不具有法律效力)

第一次审查意见通知书正文

申请号：038173441

本申请涉及一种光学数据记录方法与媒体，如说明书所述，本申请要解决的技术问题是“记录和再现包括具有几乎等于由光的衍射所确定的分辨极限或小于该分辨极限的尺寸的记录标记的记录标记串”。经审查，现提出如下的审查意见。

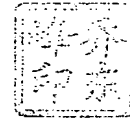
1. 权利要求1缺少实现发明目的的必要技术特征，不符合专利法实施细则第21条第2款的规定。本发明所要解决的技术问题是对于长度小于 $0.37\lambda/NA$ 的记录标记也能进行记录和再现（正如该权利要求所要求的那样）。如说明书（参见第7页17行至第8页第5行）所述，为了实现这种记录标记的记录和再现，“在数据要记录在光学记录媒体中时，……贵金属氧化物层4中的 AgO_x 被分解为 Ag 和 O_2 ，并且光吸收层5结晶。在要记录数据时产生的氧气在贵金属氧化物层4膨胀，由此使贵金属氧化物层4变形并朝上推第二电介质层32和光吸收层5。……”，也就是说，为了实现记录，第二电介质层和光吸收层的存在是必需的，否则并不能得到所述的长度小于 $0.37\lambda/NA$ 的可读取的记录标记。申请人应当在该权利要求中记载有关第二介质层和光吸收层的技术特征以及基于这种结构的记录过程和机理（特别是第二电介层和光吸收层的变形）。

2. 权利要求1对技术方案的表述还存在不清楚的问题，不符合专利法实施细则第20条第1款的规定。该权利要求中所述的“将贵金属颗粒不可逆地淀积在贵金属氧化物层中”表达的技术含义不清楚，因为该记录媒体在记录之前并不存在贵金属颗粒，而是在记录过程中由金属氧化物分解产生的，而目前的表述方式似乎是从外界附加的金属颗粒。由此，申请人应当根据说明书中具体公开的内容重新撰写该技术特征，以清楚准确地表达技术方案。

3. 权利要求8不具备专利法第22条第2款规定的新颖性。权利要求8请求保护一种光学记录媒体，而对比文件1已公开了一种光学记录媒体，并具体（参见说明书第[0018、0025、0026]段）披露了如下技术特征：包括一个记录层，该记录层可由铂、金的氧化物构成（即贵金属氧化物）。因此对比文件1已经公开了该权利要求的全部技术特征，且对比文件1所公开的技术方案与该权利要求所要求保护的技术方案属于同一技术领域，并能产生相同的技术效果，因此该权利要求所要求保护的技术方案不具备新颖性。

4. 本申请的附图1不够清晰，致使不能清楚地分辨出该图中的各个细节，不符合专利法实施细则第十九条第二款的规定。申请人应当重新提交符合上述规定的附图。

基于上述理由，本申请按照目前的文本还不能被授予专利权。如果申请人按照本通知书提出的审查意见对申请文件进行修改，克服所存在的缺陷，则本申请可望被授予专利权。对申请文件的修改应当符合专利法第三十三条的规定，不得超出原说明书和权利要求书记载的范围。



审查员：乔东峰

代码：3611